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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/050,499  | 01/16/2002  | Bhanwar Singh        | F0653               | 7713             |
| 29393   | 7590        | 12/09/2003           | EXAMINER            |                  |
| ESCHWEILER & ASSOCIATES, LLC<br>NATIONAL CITY BANK BUILDING<br>629 EUCLID AVE., SUITE 1210<br>CLEVELAND, OH 44114 |             |                      | VU, DAVID           |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2818                |                  |

DATE MAILED: 12/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 10/050,499             | SINGH ET AL.        |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | DAVID VU               | 2818                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of group I (Claims 1-19) on July 18, 2003 is acknowledged. The traversal is on the ground that a search of both the process and system claims would not present a serious burden to the examiner. This is not found persuasive because a prima facie burden is established by showing separate classification of the two inventions. Here, such separate classification has been shown and thus a burden established. Applicant's mere contention to the contrary is insufficient to overcome such a showing. The requirement is still deemed proper and is therefore made FINAL. Claims 20-29 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction requirement in paper filed on July 18, 2003.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Esquibel (US 5,885,402).

Regarding claims 1-9, Esquibel in related text (Col. 3, lines 35-61; Col. 4, lines 35-55; Col. 6, line 50-Col. 7, line 3 and Col. 7, lines 52-65) discloses a system for depositing films on a semiconductor wafer comprising: a deposition chamber operable to deposit a film on the semiconductor wafer therein according to one or more process conditions; an acoustic microbalance within the deposition chamber; and a controller, wherein the controller is configured to provide feedback control of the one or more process conditions based on data provided at least in part by the acoustic microbalance.

Regarding claims 10-19, Esquibel in related text (Col. 3, lines 35-61; Col. 4, lines 35-55; Col. 6, line 50-Col. 7, line 3 and Col. 7, lines 52-65) discloses system for depositing films on a semiconductor wafer comprising: a deposition chamber operable to deposit a film on the semiconductor wafer therein according to one or more process conditions; an acoustic microbalance having a cantilever within the deposition chamber (Col. 6, lines 54-66); and a controller, wherein the controller is configured to detect an endpoint of a deposition process based on data provided at least in part by the acoustic microbalance, and wherein the controller comprises a computer system component that encodes a model or database that accounts for a difference between an extent of deposition on the cantilever and an extent of deposition on the semiconductor wafer (Col. 7, lines 52-65 and Fig. 5).

### ***Conclusion***

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Vu whose telephone number is (703) 305-0391. The new


Application/Control Number: 10/050,499  
Art Unit: 2818

Page 4

phone number after January 08, 2004 will be (571) 272-1798. The examiner can normally be reached on Monday-Friday from 8:00am to 5:00pm.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms., can be reached on (703) 308-4910. The new phone number after January 08, 2004 will be (571) 272-1787.

DV  
David Vu.



David Nelms  
Supervisory Patent Examiner  
Technology Center 2800